

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

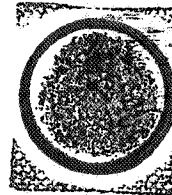
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DATE: April 7, 1978

SUBJECT: Section 18 request for the use of Atrazine on Proso Millet
Caswell#63

FROM: William Greear *W. Greear*
Toxicology Branch

TO: Hoyt Jamerson
Special Registration Branch
Registration Division (WH-567)



Several tolerances have been established for Atrazine on raw agricultural crops, ranging from 0.02 ppm to 15 ppm (on forage). The following long-term data are available:

- 2-Year Dog Feeding Study - NEL = 150 ppm
- 2-Year Rat Feeding Study - NEL = 100 ppm
- 3-Generation Reproduction Study - NEL = 100 ppm

The data will support an allowable daily intake (ADI) of 0.0375 mg/kg ^{AD}diet/day, based on the results of the 2-year Dog Feeding Study. The tolerances in existence today account for approximately 3.42% of the ADI. The addition of a temporary tolerance of 0.25 ppm on millet grain and 5 ppm on millet straw will have a maximum theoretical residue contribution (MTRC) of 0.0001125 mg/day of Atrazine to the 1.5 kg diet of a 60 kg human.

This "theoretically" represents approximately 0.005% of the ADI or approximately a 0.147% increase in residues of Atrazine contributed to the human daily diet. It should also be noted that Dr. T.A. Dudek, Regional Coordinator IR-4 Project, indicates no detectable residues (<0.1 ppm) were found in proso millet grain or straw samples grown in Western Nebraska.

Therefore, the Toxicology Branch has no objection to the issuance of a Section 18 Emergency Exemption for this specific use since the use will not significantly increase exposure of humans to residues of Atrazine.

*Note: In a memo from the Chief of the Fungicide-Herbicide Branch dated 2/23/78, it was indicated that Atrazine, manufacturing by Ciba-Geigy is no longer in the hold category (due to possible nitrosamine contamination) and such products may be processed.

Typists: TH

for GEW 4/14/78

File last updated 4/6/78

ACCEPTABLE DAILY INTAKE DATA

Dog	NOEL	S.F.	ADI	MPI
mg/kg	ppm		mg/kg/day	mg/day/60kg
3.750	150.00	100	0.0375	2.2500

Published Tolerances

CROP	Tolerance	Food Factor	mg/day/1.5kg
Corn, all types (38)	0.250	2.52	0.00947
Macadamia nuts (87)	0.250	0.03	0.00011
Pineapple (123)	0.250	0.30	0.00111
Sorghum (147)	0.250	0.03	0.00011
Sugar, cane & beet (154)	0.250	3.64	0.01364
wheat (170)	0.250	10.30	0.03886
Eggs (54)	0.020	2.77	0.00083
Milk & Dairy Products (93)	0.020	28.62	0.00858
Meat, inc poultry (89)	0.020	13.85	0.00415

MPI	TMRC	% ADI
2.2500 mg/day/60kg	0.0769 mg/day/1.5kg	3.42

Current Action Section 18

CROP	Tolerance	Food Factor	mg/day/1.5kg
Millet (94)	0.250	0.03	0.00011

MPI	TMRC	% ADI
2.2500 mg/day/60kg	0.0770 mg/day/1.5kg	3.42
